Tributes to M. F. Maury
Virginia's Virtuous Visionary

by
Howard J. Cohen

To the mariner, Matthew Fontaine Maury not only is forever linked with the title "Pathfinder of the Seas," but for his role in developing Wind and Current Charts in 1847, the predecessor of today's NIMA Pilot Chart Atlas.
Within the world of oceanography he is recognized as the "Father of Oceanography," for his lifelong work and studies. Maury's 1855 *The Physical Geography of the Sea* is considered the first modern textbook of oceanography. In the field of astronomy, he is a pioneer of cataloging the stars, which he began in 1845. He believed that the United States should not be dependent upon foreign calculations and celestial observations, and in 1849 was responsible for establishing the American Nautical Almanac Office.

In 1853, Maury organized the first International Maritime Meteorology Conference in Brussels and represented the United States. Filling out a weather log? Maury founded Naval Meteorology and "standardized" oceanographic data log entries of naval vessels and merchant marine ships. An American pioneer he wore many hats before, during, and after the Civil War. Throughout his distinguished career and diverse life, he served as: First Superintendent of the National Observatory in Washington, D.C.; Confederate Head of Coast Harbor and River Defences; and Physics Chairman at the Virginia Military Institute.

It is only fitting that Matthew F. Maury is memorialized in so many ways. This is the first multi-page pilot chart article ever to have been produced…*yet another fitting tribute!*

(Photo courtesy of NAVOCEANO)

Matthew Fontaine Maury Oceanographic Library

With over 160,000 volumes of information, the Matthew Fontaine Maury Oceanographic Library, located at the Naval Oceanographic Office at Stennis Space Center, MS, contains the world's foremost military collection of physical oceanography materials. From modern CD-ROMs to handwritten 18th century ships' logs, the library is noted for the technical diversity of its holdings. The Maury Library was named and occupied in March, 1986, and is a valuable resource for scientists in government, academic, and private industry.

(Photo courtesy of City of Fredericksburg, Office of Economic Development and Tourism)

Maury Stadium

Maury Stadium located in Fredericksburg, VA, hosts James Madison High School football games and city festivals.

The National Imagery and Mapping Agency and Maury Hall sit along the Potomac River in Bethesda, MD.

NIMA's Maury Hall

This oil painting graces the entrance to NIMA's Maury Hall. In 1989, George Carter Werth and twin brother Lewis Herndon Werth, and another brother Capt. James Maury Werth USN (Ret.) all great-grandsons of Matthew F. Maury were on hand at the dedication ceremony. The United States Naval Academy also has a Maury Hall; in addition, there is the Maury-Brooke Hall at the Virginia Military Institute.

Maury Display Case

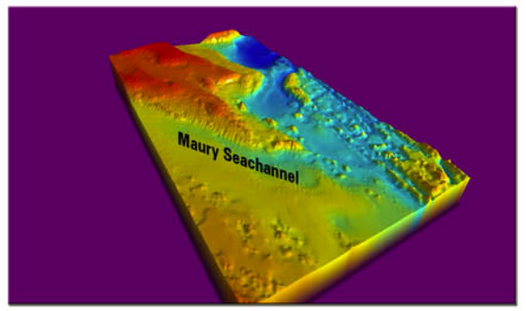
Rear Admiral Richard D. West, Oceanographer and Navigator of the Navy, stands by a Maury display case and an "1851 Whale Chart" outside his office at the United States Naval Observatory, Washington D.C. Several of Maury books, including an 1853 Sailing Directions are displayed with NIMA's Sailing Directions and CD-ROM of today.

(Photo courtesy of Virginia Department of Transportation)

MATTHEW FONTAINE MAURY
PATHFINDER OF THE SEAS
THE GENIUS WHO FIRST SNATCHED
FROM THE OCEAN AND ATMOSPHERE
THE SECRET OF THEIR LAWS.
BORN JANUARY 14TH, 1806
DIED AT LEXINGTON, VA. FEBRUARY 1ST, 1873
CARRIED THROUGH GOSHEN PASS TO HIS FINAL
RESTING PLACE IN RICHMOND, VIRGINIA.
EVERY MARINER
FOR COUNTLESS AGES,
AS HE TAKES HIS CHARTS TO SHAPE
HIS COURSE ACROSS THE SEAS,
WILL THINK OF THEE
HIS INSPIRATION HOLY WRIT
PSALMS 8 & 107, VERSUS 3, 23 & 24
ECCLESIASTES CHAP. 1, VERSE 8
A TRIBUTE BY HIS NATIVE STATE
VIRGINIA
1923

Road Marker

Maury was disinterred in Lexington and moved to Richmond seven months after death. VMI cadets escorted the cortege along the North River. Goshen Pass outside of Lexington was a favorite spot of Maury. At this location his casket was covered with mountain laurel and rhododendron and placed on a train for final burial in Richmond. In 1923, at Goshen Pass, a highway marker in his honor was dedicated. Today, Virginia's Department of Transportation maintains this marker. In addition, Virginia named Highway 39 out of Goshen the "Maury Highway," and the North River became the "Maury River."



Maury Seachannel 56°33´N, 024°00´W.

The Advisory Committee on Undersea Features approved this name on February 18, 1969. The depth is approximately 3,200 meters. Maury prepared charts of the bottom of the Atlantic Ocean between the United States and Europe, and assisted Cyrus W. Field with laying the first transatlantic cable. The first official message was sent on August 16, 1858. Maury's knowledge made this achievement possible and established him as the locator of the first transatlantic cable. There is also the "Maury Deep" south of the Aleutian Islands located in 51°00´N, 170°00´W.

The Matthew Fontaine Maury Association
invites you to the unveiling of the
Monument
in honor of
Commander Matthew Fontaine Maury U.S.N. C.S.N.
on Monument Avenue
Monday afternoon, November the eleventh
nineteen hundred and twenty-nine
at three o'clock
Richmond, Virginia

(Jan K. Herman collection)

Invitation

The Monument was unveiled by two of Maury's great-grandchildren in an impressive military and civilian setting on November 11, 1929. Miss Mary Maury Fitzgerald and Master Matthew Fontaine Maury Osborne pulled the cords which released the canvas spread over the monument. Note the "U.S.N., C.S.N." after Maury's name recognizing his role in both United States Navy and the Confederate States Navy.

Matthew Fontaine Maury Monument

This Matthew Fontaine Maury Monument stands at the end of the historic section of statues on Monument Avenue in Richmond. The Women's Club of Virginia was the driving force behind the construction of this monument raising $60,000 needed from donations by the State of Virginia, the City of Richmond, and private benefactors. William F. Sievers, a native from Richmond, was the designer. Stylistically, this sculpture is the most complex of all the monuments. Sievers captured an entire range of experiences in this monument and equated Maury with playing a part in all of them. The statue is composed with images of water, land, and sky, relating to Maury's achievements in oceanography, navigation, and meteorology. Since Maury's talents reached beyond the Civil War, his statue has been referred to as the "man of peace" amidst the other Confederate war heroes. This was the last of the Confederate monuments to be erected on Monument Avenue and joins statues of Robert E, Lee, "J.E.B." Stuart, Jefferson Davis, and "Stonewall" Jackson.

IN MEMORY
OF
MATTHEW FONTAINE MAURY,
BORN IN
SPOTTSYLVANIA CO, VIRGINIA,
JANUARY 14th 1806,
DIED IN
LEXINGTON, VIRGINIA,
FEBRUARY 1st, 1873.

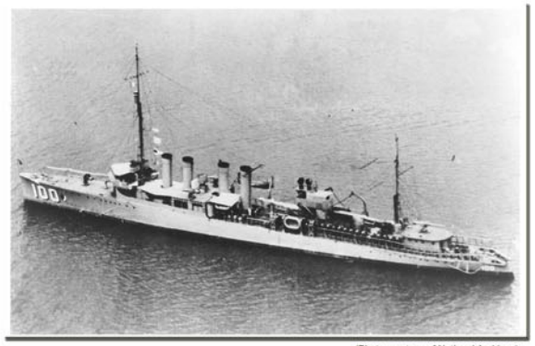
"ALL IS WELL"

Grave

"All is well" Maury's last words is etched on his grave stone. His final resting spot is in Hollywood Cemetery, Richmond, VA. Although he died on February 1, 1873, in Lexington, VA, Maury's widow Ann Herndon, wished her husband to be buried in the former Confederate capital. She purchased Mount-26 within the dignitary section, and Maury was interred on September 27, 1873. Called President Circle, behind Maury in the black iron birdcage, is the grave of President James Monroe, and to the left (not pictured), is where President John Tyler is buried.

Maury High School

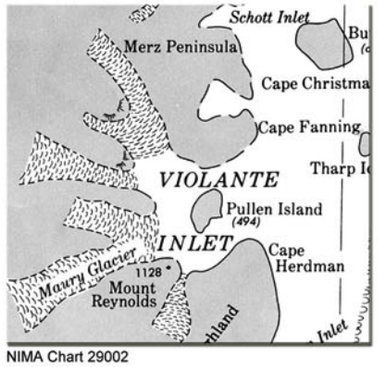
Originally the Norfolk High School, in February of 1911, it was re-named the Matthew Fontaine Maury High School. This is a postcard dated 1917. In 1950, Maury's great-grandson, Capt. James Maury Werth graduated Maury High and went on to serve his country by joining the Navy. His last assignment before retiring from active duty was to serve as the Superintendent of the U.S. Naval Observatory in Washington, thus following in the footsteps of his famous great-grandfather.



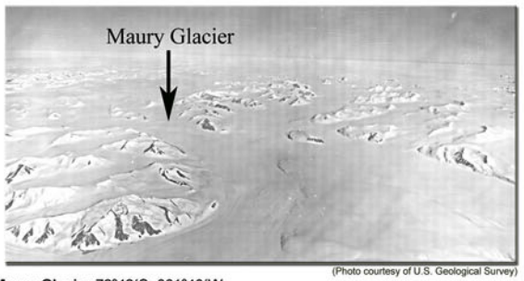
(Photo courtesy of National Archives)

Maury I

Maury (DD-100) was the first ship named after Maury and was laid down May 4 1918, by Fore River Shipbuilding Co., Quincy, Mass., and was launched July 4,1918. She reported for duty with the Adriatic Detachment on February 18, 1919, and participated in "umpiring" duties for the natural harbors of the Adriatic. On July 17, 1920 she was redesignated DM-5, light minelayer. She was decommissioned March 19, 1930, and scrapped May 1,1934.



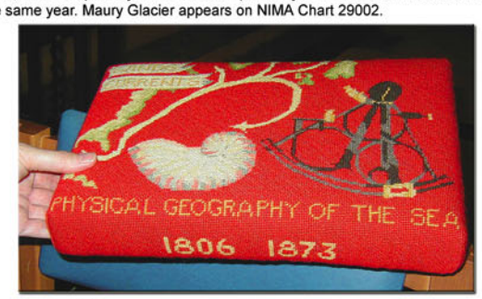
NIMA Chart 29002



(Photo courtesy of U.S. Geological Survey)

Maury Glacier 72º42´S, 061º40´W.

Maury Glacier is 4 miles wide, flowing in an ENE direction to the Southwest corner of Violante Inlet, on the East coast of Palmer Land. It was discovered and photographed from the air in December 1940 by members of the United States Antarctic Service. Maury was an advocate of Antarctic exploration and the name was applied by the United Kingdom via their Antarctic Place-Names Committee (UKAPC) in 1955, and accepted by the US ACAN (Advisory Committee on Antarctic Names) the same year. Maury Glacier appears on NIMA Chart 29002.



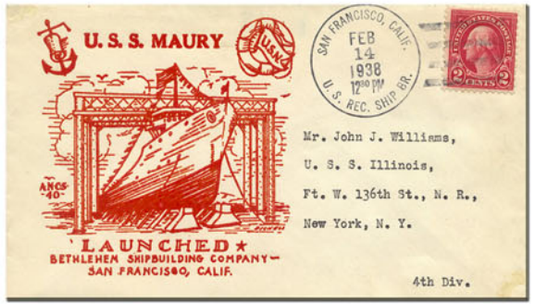
Kneeling Cushion

This 11 x 14 inch "kneeling cushion" is used for prayer at the Washington National Cathedral. There are 180 cushions dedicated to people that were important in shaping our country. In 1970, Mrs. William Chisholm made the cushion in honor of Matthew F. Maury.

(Photo courtesy of National Archives)

Maury II

The second Maury (DD-401) was launched February 14, 1938 and was sponsored by Miss Virginia Lee Maury Werth, granddaughter of Matthew F. Maury. Assigned to the Pacific Fleet after commissioning, Maury was operating out of Pearl Harbor when the United States entered World War II. Maury received 16 battle stars for her service in the Pacific Theater. She was decommissioned October 10, 1945 in Philadelphia and soon after was sold for scrap.



First Day Cover

Stained Glass

This is located within the Washington National Cathedral, Washington, D.C. Mrs. Alice Parmelee, a granddaughter of Matthew Maury, donated $50,000 to memorialize in stained glass her grandfather, husband James Parmelee, and Myron T. Herrick, an U.S. Ambassador to France. On May 21, 1935, at the dedication ceremony, Captain J.F. Hellweg, the Superintendent of the Naval Observatory, in tribute to Maury stated, "…that one man has made such a deep and lasting impression upon the world, places him in a preeminent position as one of the world's great pioneers. Very aptly, Lieutenant Maury has been called "The Pathfinder of the Seas," a title which he so richly deserved."

(Photo courtesy of U.S. Naval Institute)

Maury III

The third Maury, built under a Maritime Commission contract, was launched as *Renate* (AKA-36) an attack cargo ship and commissioned February 28, 1945. She transported Pacific veterans back to the United States. In June 1946 *Renate* entered Portsmouth Naval Shipyard for conversion to a survey ship and on July 12, 1946 was renamed the USS Maury (AGS-16). On January 6, 1947, USS Maury got underway for the Pacific for her first hydrographic mission which was the charting of the waters around Truk and Kwajalein. In 1965 the USS Maury surveyed off the coast of South Vietnam and the Mekong Delta. Into 1969 her efforts had added significantly to knowledge of the characteristics of the coastal area in which naval forces conduct riverine warfare and amphibious operations.

STREET SIGNS

Richmond, VA.

(City of Charlottesville Traffic Shop)

Charlottesville, VA.

Fontaine Avenue is U.S. 29 Bus. and a continuation of Jefferson Park Avenue in western Charlottesville, VA. Both Fontaine and Maury avenues are named for Matthew Fontaine Maury, Maury was a grandson of the Rev. James Maury, who taught science to a young Thomas Jefferson in eastern Albemarle County.

(Photo courtesy of U.S. Naval Institute)

Maury IV

Delivered to the Navy on March 31, 1989, the USNS Maury (T-AGS-39) was placed in service with the Military Sealift Command for surveying operations. Placed Out-of-Service in September 1994, she was transferred to U.S. Maritime Administration (MARAD) for lay up in the National Defense Reserve Fleet, Suisun Bay, Benica, CA. On May 4, 1996, the vessel was transferred by MARAD to the California Maritime Academy as a training ship, and renamed TS Golden Bear III.

Hat USNS Maury

LAKE MAURY

Lake Maury is a 165-acre artificial lake that was created in 1930 and named on January 7, 1932. It's part of the Mariners' Museum Park that is owned and maintained by The Mariners' Museum, Newport News, VA.

A plaque by the lake reads:

NAMED FOR
MATTHEW FONTAINE MAURY
1806-1873
BELOVED VIRGINIAN
WHOSE CONTRIBUTION TO THE
SCIENCE OF OCEANOGRAPHY
LANDED HIM THE TITLE
"PATHFINDER OF THE SEAS"

(Photo courtesy of The Mariners' Museum, Newport News, VA.)

A photograph dated 1868 of Professor Maury, L.L.D., Physics Chairman, Virginia Military Institute.

(Photo courtesy of VMI)

(Photo courtesy of VMI)

Built in 1909, the Maury-Brooke Hall is named for two former VMI professors whose names are notable in American naval history. John Mercer Brooke was a protégé of Maury. As a midshipman, Brooke invented a deep-sea sounding apparatus that could bring up ocean bed samples from 12,000 feet while serving at the US Naval Observatory under Maury. In latter years both were professors of physics at VMI after the Civil War, Maury from 1868 until his death in 1873 and Brooke for more than thirty years, from 1865 to 1899. Today, Maury-Brooke Hall is home to the VMI Regimental Band, *The Bomb* (cadet yearbook), *The VMI Cadet* (cadet newspaper), and the Honor Court.
In 1962, *The Matthew Fontaine Maury Memorial Fund Scholarship*, was established by his daughter, Ann H. Maury and is used to assist worthy students.

1859 Pilot Chart for the South Indian Ocean. Note the "L.L.D." title after Maury's name as the University of Cambridge honored Maury with a L.L.D. degree.
Although today's wind rose looks a bit different, the portrayal of information in 5-degree blocks of latitude and longitude has not changed.

Initially refered to as "Wind and Current Charts," they were a series of six distinctive charts. Series A, North Atlantic (Track Chart) became the first to be published in 1847, based on the path a ship sailed on its voyage.
Series B, Trade Wind Charts, were constructed specifically for the Atlantic and Indian Oceans and gave data for specific types of winds.

Series C, Pilot Charts, gave the directions and frequencies of wind that could be expected during a voyage.
Series D, Thermal Charts, revealed sea-surface temperatures for the Atlantic.
Series E, Storm and Rain Charts, portrayed storm tracks for the Atlantic and Pacific Oceans.
Maury also produced, Series F, Whale Charts,based on observations received exclusively from whaling vessels. The Whale Chart showed in 5° blocks of the world, what type of whale you could expect to find.

MATTHEW FONTAINE MAURY - SCIENTIST OF THE SEAS, and FATHER OF OCEANOGRAPHY

KNIGHTHOODS

ORDER OF ST. ANN by the CZAR OF RUSSIA: KNIGHT OF THE DANNEBROG OF KING OF DENMARK: ORDER OF TOWER AND SWORD, by the KING OF PORTUGAL: ORDER OF ST. LEOPOLD by the KING OF THE BELGIANS.

GREAT GOLD MEDALS

MEDAL OF SCIENCE plus KOSMOS MEDAL both by the King of PRUSSIA: (The KOSMOS was awarded at request of ALEXANDER VON HUMBOLT for whom it had been exclusively struck): MEDAL OF SCIENCE By EMPEROR OF FRANCE: OF ARTS AND SCIENCE By EMPEROR of AUSTRIA: MEDAL OF SCIENCE By KING OF THE NETHERLANDS: A second one By EMPEROR OF FRANCE: ORDER OF THE GOTHS AND THE VANDALS (struck especially for MAURY) By KING OF SWEDEN AND NORWAY: GOLD MEDAL OF SARDINIA: AND GOLD MEDAL of the PARIS UNIVERSAL EXPOSITION. A COLLECTION OF ALL 13 MEDALS struck during the ROMAN CATHOLIC PONTIFICATE OF PIUS IX.

MEMBERSHIPS OF VARIOUS LEARNED SOCIETIES OF THE WORLD AND OTHER HONORS

IMPERIAL ACADEMY OF SCIENCES, ST. PETERSBURG, RUSSIA: BERLIN ACADEMY: LETTERS AND FINE ARTS, BELGIUM: OF SCIENCES of BRUSSELS: ROYAL ASTRONOMICAL SOCIETY OF ENGLAND: and some FORTY OTHER ONES OF EUROPE, THE ORIENT AND THE UNITED STATES: COMMANDER OF LEGION OF HONOR BY EMPEROR OF FRANCE.

LLDs (1852-1868)

UNIVERSITY OF CAMBRIDGE, ENGLAND: UNIVERSITY OF NORTH CAROLINA: COLUMBIA COLLEGE, WASHINGTON, D.C.

HONORS AWARDED TO MATTHEW FONTAINE MAURY IN THE 20th CENTURY

A STAINED GLASS WINDOW IN THE NATIONAL CATHEDRAL IN WASHINGTON, D.C.
Naval Ships named for him; DESTROYERS USS MAURY DD 100, USS MAURY DD 401, and 3 Navy Survey Ships.
AMERICAN NATIONAL HALL OF FAME, in NEW YORK: MAURY HALL, UNIVERSITY of VIRGINIA; MAURY STATUE on MONUMENT AVENUE IN RICHMOND, VA.; MAURY HIGH SCHOOL in NORFOLK, VA.: and most importantly, MAURY HALL, 1949, and the 1989 ESTABLISHMENT OF THE MATTHEW FONTAINE MAURY FELLOWSHIP ENDOWMENT at the VIRGINIA INSTITUTE OF MARINE SCIENCE AND SCHOOL OF MARINE SCIENCE, OF THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA.

The National Imagery and Mapping Agency would like to thank Captain James Maury Werth, U.S.N. (Ret.), Dr. Richard W. Spinrad, Technical Director, Oceanographer of the Navy, and Mr. Jan K. Herman, Editor, *Navy Medicine* for their cooperation and assistance.